## UNITED STATES PATENT AND TRADEMARK OFFICE CERTIFICATE OF CORRECTION

PATENT NO. : 7,684,506 B2 Page 1 of 1

APPLICATION NO.: 10/589080 DATED: March 23, 2010

INVENTOR(S) : Yutaka Murakami et al.

It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

Claim 1, column 19, line 13 incorrectly reads:

"makes space-time block code signal"

and should read:

"makes a space-time block code signal"

Claim 2, column 19, line 14 incorrectly reads:

"The transmitting apparatus of claim 1 further compris-"

and should read:

"The transmitting apparatus of claim 1, further compris-"

Claim 2, column 19, line 16 incorrectly reads:

"a multi-carrier modulator that assigns a signal made in th" and should read:

"a multi-carrier modulator that assigns a signal made in the"

Claim 3, column 19, line 23 incorrectly reads:

"tus and receiving apparatus, the receiving apparatus for" and should read:

"tus and a receiving apparatus, the receiving apparatus for"

Claim 3, column 20, line 9 incorrectly reads:

"third transmission data by estimating pattern of the"

and should read:

"third transmission data by estimating a pattern of the"

Signed and Sealed this

Third Day of August, 2010

David J. Kappos Director of the United States Patent and Trademark Office

Jand J. Kappas